

proposal to correct FIG. 2 has been made as suggested in the Office action, with changes marked in red ink for approval by the Examiner. Formal drawings that incorporate these corrections will be submitted in a separate cover letter, upon approval by the Examiner. Also, the specification has been amended to correct minor typographical /grammatical-type errors, including the correction identified in the Office action. Claims 1-3, 7-14 and 20 have been amended, while new claims 21-24 have been added. Applicants submit that the amendments were for purposes of clarification, and not for reasons related to patentability. The rejections are traversed in view of the following remarks, and reconsideration is respectfully requested.

The present invention is generally directed towards maintaining information in the form of location bindings for a merchant that identify one or more regions serviced by the merchant, beyond only that region in which the merchant has a physical presence. For example, instead of maintaining a single ZIP code that corresponds to the merchant's address, a number of ZIP codes that the merchant services may also be maintained in association with the merchant, so that the merchant will be identified in response to a search request external to the merchant's ZIP code, but in a ZIP code serviced by the merchant as identified by the location bindings. Other aspects of the present invention are directed towards submitting a query for a merchant in a designated region, and receiving a business listing identifying a merchant that is not in the designated region, along with an explanation (such as text or glyph based) as to why that merchant was identified, e.g., the merchant services the region even though the merchant does not have a physical location in the region. Note that the above description is for example and informational purposes only, and should not be used to interpret the claims, which are discussed below.

In contrast to the claims of the present invention, Dunworth teaches that a topic and geographic area are searched, and to locate a business, the business must have a physical presence

within the geographic area. The geographic areas can expand in a hierarchical manner, that is, an intermediate geographic area that includes a smaller geographic area can be searched, as can a larger geographic area that includes the intermediate geographic area (and thus the smaller geographic area). Dunworth, column 3, lines 46-54. However, as conceded in the Office action, Dunworth fails to disclose the concept of maintaining information that allows a business to be located when that business that does not have a physical location within a geographic area specified in a request. Instead, to locate such a business, Dunworth teaches that the database needs to search an expanded area by having the user manually ascend in the hierarchy (Dunworth, column 9, lines 1-4) until the geographic area specified in the request actually encompasses the physical location of the business. To this extent, Dunworth teaches away from the present invention, in which in effect, the location bindings automatically extend the search region beyond that actually specified.

Notwithstanding the fact that Dunworth teaches manually expanding and contracting the geographic search area, which requires significant user interaction, (as opposed to providing some teaching or suggestion as to how a business can be located in a search when it does not physically reside within a specified geographic area), the Office action contends that Getchius, which teaches a virtual business that need not have a particular physical location, can somehow be combined with Dunworth to reach the claims of the present invention. Applicants strongly disagree with this contention.

In fact, even if true that Getchius teaches that a virtual business need not have a particular physical location, the allegation that the present invention is somehow obvious because of this is not reasonably supported by the prior art, and in general does not logically follow for a number of significant reasons. For one, the prior art of record does not disclose or suggest any apparent way to modify Dunworth to accommodate a virtual business, either explicit or otherwise. In fact, the prior

art of record is silent as to such a concept, let alone how this might be accomplished, or why it might be desirable to do so.

For another, such a suggestion is counterintuitive, as such a combination would generally frustrate the very purpose of Dunworth, which is expressly geographic, and not topical, in nature. Dunworth, column 5, lines 60-65. By way of example, assuming that the Office action's alleged modification / combination was possible, to include virtual businesses along with those in the geographic area of Dunworth, any virtual business that had no physical location would have to be returned in every search in Dunworth's system, making the geographic area specified by the user useless for many searches. In fact, for many searches the specifying of a request directed to a desired region would be pointless, since a large number of virtual businesses would be returned with the Office actions' proposed modification; (using the Office action's example, Amazon.com and every similar online retailer would be returned for any search in which the topic criterion was also met, even though the user expressly specified a geographic area). Thus, any such proposed modification would render the Dunworth et al. reference unsatisfactory for its intended purpose, and accordingly, the suggested modification is impermissible. See MPEP § 2143.01.

Further, the claims (e.g., independent claims 1, 8, 12 and 20) generally recite that "location binding information" is maintained in association with a merchant. However, in rejecting these claims, the Office action uses the example of Amazon.com as an example of a virtual business that would be returned for a search, regardless of the user having specifically provided a desired region. To do this with the present invention, Amazon.com would have to have a location binding (e.g., ZIP code) for every location in which it wanted to be returned in a search, which is of course highly impractical, and certainly not taught or suggested by Dunworth and/or Getchius. Instead, the present invention essentially teaches the use of actual location bindings that automatically expand a

search beyond the criteria that the user has actually requested, yet only when there is an actual match with a location binding. The Office action does not provide any information as to how the virtual business of Getchius might possibly accomplish such a task, except to broadly allege without support that Dunworth could be somehow modified to do this for virtual businesses that have no physical location.

By law, in order to establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In addition, "all words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Further, if prior art, in any material respect teaches away from the claimed invention, the art cannot be used to support an obviousness rejection. *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed Cir. 1997).

Neither Dunworth nor Getchius, whether considered alone or in any permissible combination, teach the limitations of maintaining location binding information associating a merchant with a plurality of identified regions, and/or using that location binding information in a search that specifies a desired region, to see if there is a match, as generally recited in independent claims 1, 8, 12 and 20. Further, as recognized in the Office action, Dunworth has no facility for businesses that have no physical location in a region, and instead Dunworth teaches that the only way to locate such a business is to expand the geographic area that is searched to a size in which the business has a presence, which teaches away from the concept of automatically expanding a requested search region via location bindings, as effectively accomplished by the present invention. Applicants further submit that claim 15 is thus patentable over Dunworth and/or Getchius for similar reasons, e.g., Dunworth cannot be permissibly modified by or

combined with Getchius in a manner that allows a merchant to be identified when that merchant is not in the specified geographic area. For at least the foregoing reasons, each of the claims are patentable over the prior art of record as a matter of law. Reconsideration and withdrawal of the §103(a) rejections are respectfully requested.

Further, as a matter of law, obviousness may not be established using hindsight obtained in view of the teachings or suggestions of the applicants. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). To guard against the use of such impermissible hindsight, obviousness needs to be determined by ascertaining whether the applicable prior art contains any suggestion or motivation for making the modifications in the design of the prior art article in order to produce the claimed design. The mere possibility that a prior art teaching could be modified such that its use would lead to the particular limitations recited in a claim does not make the recited limitation obvious, unless the prior art suggests the desirability of such a modification. *See In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

In the present case, the prior art is silent as to such a modification / combination, which if somehow made would mostly be pointless and defeat Dunworth's geographic-based searching, as discussed above. Indeed, this is evident from the Office action's alleged motivation, which is solely based on applicants' teachings, (albeit only partially), and not on anything found in the prior art of record or elsewhere. Note that applicants generally teach including a merchant that does not have a physical location in a search result set, such as *by the use of location bindings that actually match a user-provided region*, not simply including virtual businesses that do not have physical locations, as the Office action is attempting to find via Getchius.

Instead of finding some proper motivation to combine, the Office action makes mere conclusory statements, generally directed to including virtual businesses in geographic search results, that are counterintuitive and simply not supported by the prior art. Such mere, conclusory statements do not come close to adequately addressing the issue of motivation to combine, are not evidence of obviousness, and therefore are improper as a matter of law. *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

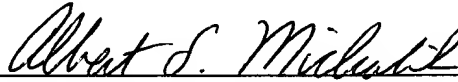
It appears that the Office action selected Dunworth, which generally refers to geographic searching, and even though it teaches away from the concept of location bindings, attempted to fill in the missing claim limitations with a reference (Getchius) that only generally teaches the concept of a virtual business, when in fact including purely virtual businesses in a result set (as alleged in the Office action) would essentially defeat Dunworth's geographic-based search. Thus, in the present case, it is clearly evident that the Office can only have located Dunworth and Getchius via impermissible hindsight gleaned from applicants' own teachings, and thereafter made a (failed) attempt to fit the prior art's teachings into applicants' invention, even though neither teach or suggest location binding information to expand a search region, (and which Dunworth essentially teaches away from, as discussed above). For at least these additional significant reasons, applicants submit that the §103(a) rejections are improper as a matter of law, and respectfully request reconsideration and withdrawal of the rejections.

CONCLUSION

In view of the foregoing remarks, it is respectfully submitted that claims 1-24 are patentable over the prior art of record, and that the application is good and proper form for allowance. A favorable action on the part of the Examiner is earnestly solicited.

If in the opinion of the Examiner a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney at (425) 836-3030.

Respectfully submitted,



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APPENDIX A

(marked up copy showing the changes to the paragraphs amended herein)

Please substitute the following paragraph for the paragraph beginning at page 1, line 10:

-- Internet yellow pages are a useful tool for finding a particular entity, e.g., business, or finding a type of entity in a selected region. Some contemporary Internet yellow pages permit a user to direct a search to a particular region, such as a ZIP code defined region, a city, or a state (a "bounded query"). The results of the search identify a business or a particular number of businesses if the query is numerically limited, that have a physical presence (e.g., office) or a mailing address within that particular region. --

Please substitute the following paragraph for the paragraph beginning at page 5, line 8:

-- To provide such an enhanced result set, regional service merchants are stored in a richer schema than ordinary businesses. This richer schema provides lines of text and/or a descriptive glyph or glyphs for each regional service merchant. The text and/or glyphs are returned along with the regional service merchant's business listing so as to explain to a user why a business [this] that is not physically residing in the search area has been included in the result set. The text or glyph may indicate, for example, that a regional service merchant is mobile, territorial, or a delivery service. The text may also describe the business' service area. An application programming interface ensures that, if the business is listed as a regional service merchant, then the text and/or glyph is stored in association with the business listing. --

Appendix B

(marked up copy of the claims amended herein)

1. (Amended) In a computer system, a method comprising:

maintaining location binding information associating a merchant with a [region] plurality of listed regions, including at least one listed region in which the merchant provides service and in which the merchant does not include a physical location;

receiving a request directed to [the] a particular region; [and]

searching the location binding information associated with the merchant to determine if the particular region matches at least one of the listed regions, and if so, returning information regarding the merchant [according to the information associating the merchant with the region].
2. (Amended) The method of claim 1, wherein maintaining the location binding information [associating the merchant with a region] comprises writing an entry into a database including information about [the] each listed region and information about the merchant.
3. (Amended) The method of claim 1, further comprising returning additional information regarding the merchant [providing service to the region but not having a physical location in the region].
7. (Amended) The method of claim 1, wherein the [region] plurality of listed regions comprises [a] at least one ZIP code [or a set of ZIP codes].

8. (Amended) A computer-readable medium having stored thereon a data structure, comprising:

- a first data field containing data representing information about a merchant; and
- a second data field associated with the first data field and containing location binding data representing a region in which the merchant provides service and in which the merchant does not include a physical location;

such that a search request seeking a merchant that services a particular region is compared to the second data field to determine from the location binding data therein whether the merchant represented in the first data field services that particular region, and if so, at least some of the information about the merchant contained in the first data field may be returned in response to the search request.

9. (Amended) The data structure of claim 8, further comprising a third data field, associated with the first data field, and including additional information regarding the merchant [providing service to the region but not having a physical location in the region].

10. (Amended) The data structure of claim 9, wherein the third data field comprises text that [described the fact] indicates that the merchant [providing] provides service to the region but does not have a physical location in the region.

11. (Amended) The data structure of claim 9, wherein the third data field comprises a glyph that indicates that the merchant [providing] provides service to the region but does not have a physical location in the region.

12. (Amended) A computer-readable medium having stored thereon a data structure, comprising:

a first data field containing data representing information about a merchant; [and]
a second data field associated with the first data field and containing data representing information regarding the merchant providing service to a region but not having a physical location in the region; and

a third data field associated with the first data field and containing location binding data representing a region in which the merchant provides service and in which the merchant does not include a physical location;

such that a search request seeking a merchant that services a particular region is compared to the third data field to determine from the location binding data therein whether the merchant represented in the first data field services that particular region, and if so, at least some of the information about the merchant contained in the second data field may be returned in response to the search request.

13. (Amended) The data structure of claim 12, wherein the second data field comprises text that [described the fact] indicates that the merchant [providing] provides service to the region but does not have a physical location in the region.

14. (Amended) The data structure of claim 12, wherein the second data field comprises a glyph that indicates that the merchant [providing] provides service to the region but does not have a physical location in the region.

20. (Amended) A computer system comprising:

a data store for maintaining location binding information [about] for merchants that provide service to a region, at least one merchant having location binding information for a region in which that merchant does [and that do] not include a physical location [in the region];

data entry tools for entering the information in the data store;

an application programming interface for ensuring that the information is stored with each merchant entered by the data entry tools.

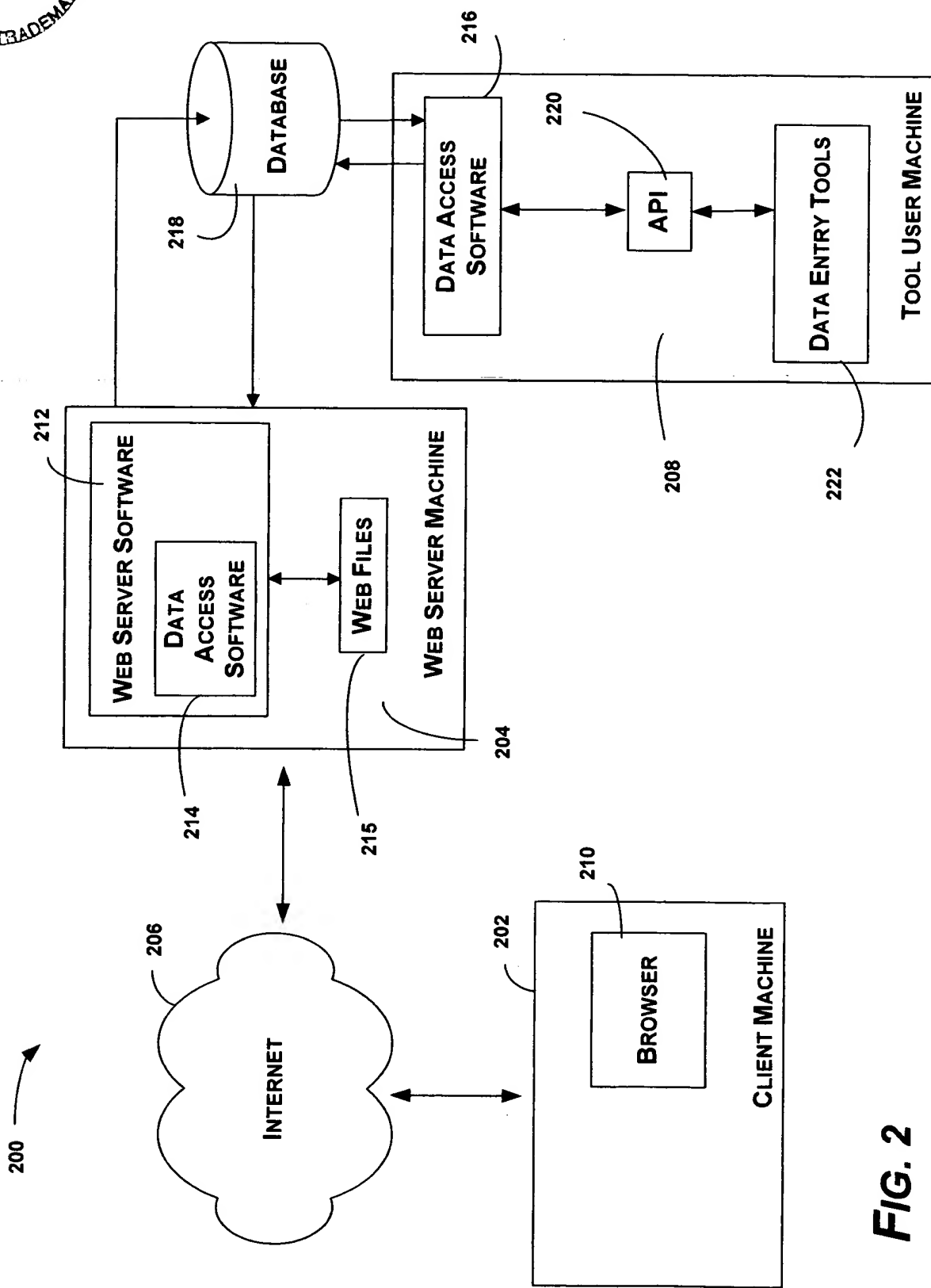
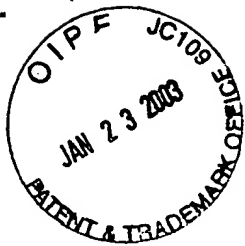


FIG. 2